## CONTENTS VOLUME 217


A. Scott. Davydov's soliton — No. 1, p. 1

Th. Hebbeker. Tests of Quantum Chromodynamics in hadronic decays of $Z^0$ bosons produced in $e^+e^-$ annihilation — Nos. 2 & 3, p. 69

E.A. Vinogradov. Vibrational polaritons in semiconductor films on metal surfaces — No. 4, p. 159

P. Sokolsky, P. Sommers and B.R. Dawson, Extremely high energy cosmic rays — No. 5, p. 225

T.S. Chang, D.D. Vvedensky and J.F. Nicoll. Differential renormalization-group generators for static and dynamic critical phenomena — No. 6, p. 279


### CONTENTS VOLUMES 211–216


C.Z. Cheng. Kinetic extensions of magnetohydrodynamics for axisymmetric toroidal plasmas — 211, No. 1, p. 1

C. Mahaux and R. Sartor. Theoretical approaches to the momentum distribution of a normal Fermi liquid — 211, No. 2, p. 53

W.J. Childs. Overview of laser-radiofrequency double-resonance studies of atomic, molecular, and ionic beams — 211, No. 3, p. 113

J. Pulido. The solar neutrino problem and the neutrino magnetic moment — 211, No. 4, p. 167

D. Meschede. Radiating atoms in confined space: from spontaneous emission to micromasers — 211, No. 5, p. 201

A. van Delden. The dynamics of meso-scale atmospheric circulations — 211, No. 6, p. 251

R. Bonetti, M.B. Chadwick, P.E. Hodgson, B.V. Carlson and M.S. Hussein. The Feshbach–Kerman–Koonin multistep compound reaction theory, Erratum — 211, No. 6, p. 376

J.-M. Richard. The nonrelativistic three-body problem for baryons — 212, No. 1, p. 1

V.P. Gudkov. On *CP* violation in nuclear reactions — 212, No. 2, p. 77

H. Knudsen and J.F. Reading. Ionization of atoms by particle and antiparticle impact — 212, Nos. 3 & 4, p. 107

L. Ray, G.W. Hoffmann and W.R. Coker. Nonrelativistic and relativistic descriptions of proton–nucleus scattering — 212, No. 5, p. 223

E. Vilallonga and D.A. Micha. The calculation of time-correlation functions for molecular collisions — 212, No. 6, p. 329

V.I. Kogan, A.B. Kukushkin and V.S. Lisitsa. Kramers electrodynamics and electron–atomic radiative–collisional processes — 213, Nos. 1 & 2, p. 1

R. Cesareo, A.L. Hanson, G.E. Gigante, L.J. Pedraza and S.Q.G. Mahtaboally. Interaction of keV photons with matter and new applications — 213, No. 3, p. 117

R. Iengo and K. Lechner. Anyon quantum mechanics and Chern–Simons theory — 213, No. 4, p. 179

J. Ford. The Fermi–Pasta–Ulam problem: paradox turns discovery — 213, No. 5, p. 271

P.H. Coleman and L. Pietronero. The fractal structure of the universe — 213, No. 6, p. 311

D. Fick, G. Grawert and I.M. Turkiewicz. Nuclear physics with polarized heavy ions — 214, No. 1, p. 1

K. Knorr. Monolayers of polar methane derivatives physisorbed on graphite — 214, No. 2, p. 113

M.P. Mattis. The riddle of high-energy baryon number violation — 214, No. 3, p. 159

D.S. Goldwirth and T. Piran. Initial conditions for inflation — 214, No. 4, p. 223

R. Battiston, D. Cocolicchio, G.L. Fogli and N. Paver. Status and perspectives of K decay physics — 214, No. 5, p. 293

V.S. Olkhovsky and E. Recami. Recent developments in the time analysis of tunnelling processes — 214, No. 6, p. 339

C. Alexandrou and R. Rosenfelder. Stochastic solution to highly nonlocal actions; the polaron problem — 215, No. 1, p. 1

E.K.H. Salje. Application of Landau theory for the analysis of phase transitions in minerals — 215, No. 2, p. 49


*Continued overleaf*

J.L. Wood, K. Heyde, W. Nazarewicz, M. Huyse and P. van Duppen. Coexistence in even-mass nuclei 215, Nos. 3 & 4, p. 101
V.F. Mukhanov, H.A. Feldman and R.H. Brandenberger. Theory of cosmological perturbations 215, Nos. 5 & 6, p. 203
S.A. Gredeskul and Yu.S. Kivshar. Propagation and scattering of nonlinear waves in disordered systems 216, No. 1, p. 1
J.A.G. Roberts and G.R.W. Quispel. Chaos and time-reversal symmetry. Order and chaos in reversible dynamical systems 216, Nos. 2 & 3, p. 63
V.V. Ulyanov and O.B. Zaslavskii. New methods in the theory of quantum spin systems 216, No. 4, p. 179
The ALEPH Collaboration. Searches for new particles in Z decays using the ALEPH detector 216, Nos. 5 & 6, p. 253
M.M. Nieto and T. Goldman. The arguments against "antigravity" and the gravitational acceleration of antimatter, Erratum 216, Nos. 5 & 6, p. 343